

REMARKS

Applicants respectfully request reconsideration of the application.

The Office requests a claim chart showing written description support as allegedly required under 37 CFR 41.202(a)(5), which applies to claims that have been added or amended to provoke an interference. However, it is not clear that 37 CFR 41.202(a)(5) is applicable. The claims have been amended and some claims have been added, but the amended and added claims are not copied from U.S. Patent 6,741,758. 6,741,758 is the only patent issued from US 2001-0055390 A1, and there are no other pending counterparts to 6,741,758. Thus, the issue with regard to a potential interference is the relationship of the pending claims in this application and those issued in 6,741,758. None of the pending claims are copied from 6,741,758.

Regardless of whether 37 CFR 41.202(a)(5) is now applicable, the annotated claims below show how priority patent 5,862,260 provides written description support for claims in the application. U.S. Patent 5,862,260 forms part of the specification because it is incorporated by reference at page 1, lines 15 and 21 of the specification. Thus, the annotated claims below establish written description support, both in the application as well as the priority patent 5,862,260.

The Office contests the priority of claims 1-6, 8, 10, 11 and rejects these claims as anticipated by U.S. Patent No. 6,741,758 under 35 U.S.C. Section 102(e). A set of annotated claims showing support for these claims in priority patent 5,862,260, filed May 16, 1996, is provided below. Based on this evidence, claims 1-6, 8, 10, 11 have priority to at least May 16, 1996.

Annotated claims with non-limiting examples of support in priority patent 5,862,260, filed May 16, 1996:

1. An image processing method of inputting image data with registration signals embedded therein (e.g., section entitled “Method for Embedding Subliminal Registration Patterns Into Images, col. 72, line 4, to col. 78, line 12; in this section, subliminal graticules

are examples of registration signals, col. 72, lines 46-59, and col. 75, lines 13-16, Figs. 29-30 illustrate examples of subliminal graticules), subjected to geometric transformation (col. 72, line 66 to col. 73, line 3), and detecting registration signals from said inputted image data to perform registration processing (Fig. 37, Fig. 33-36, corresponding text at col. 75, line 13 to col. 77, line 30), comprising: a registration signal detecting step of detecting, with a programmed processor (col. 77, lines 58-62 and col. 78, lines 1-3, programmed Pentium microprocessor and digital signal processing board configured to operate on image data stored in memory and detect digital subliminal graticules in the image data stored in memory), registration signals from said image data, the image data comprising electronic signals in a memory and the detecting including processing the electronic signals in the memory to detect registration signals in the electronic signals (col. 75, lines 13-16, Fig. 37 illustrates steps of detecting subliminal graticules); a frequency property determining step of determining, with a programmed processor, frequency properties of said image data (2D FFT of step 2 Fig. 37; steps 2-12 in Fig. 37, for example, determine frequency properties of the 2D FFT, see col. 75, line 21 (FFT routines) and subsequent processing on FFT transformed image data at col. 75, line 25 to 62); a geometric transformation identifying step of identifying, with a programmed processor, a geometric transformation to which said image data is subjected, using said detected registration signals and determination results of said determination in the frequency property determining step (Fig. 37 shows determining rotation angle (e.g., steps 6 and 7) and scale (e.g., steps 9-13); see also col. 75, lines 41-62 indicating determination of rotation angle, see col. 76, lines 41-59 discussing how to find the “fine tuned” rotation and scale); and a geometric transforming step of using said identified geometric transformation to compute registered image data (col. 91, lines 58-63, specifically refers to inverse transforming to provide a registered image).

2. The image processing method according to claim 1, further comprising: a frequency transforming step of transforming said image data into frequency components (col. 75, line 21 (FFT routines)).

3. The image processing method according to claim 1, wherein in said frequency property determining step, determination is made using frequency components of said image data (**col. 75, lines 41-62 indicating determination of rotation angle using power spectrum calculated from frequency components**).

4. The image processing method according to claim 1, wherein in said frequency transforming step, Fourier transformation is performed, and conversion into amplitude spectra of said frequency components is made (**see Figs. 29-30 and Figs 33C (amplitudes of frequency components along angle A) and 34C (amplitudes of frequency components along a circle at radius A) both showing amplitudes of frequency components in frequency transformed image data**).

5. The image processing method according to claim 1, further comprising: a block dividing step of dividing said image data into at least one block; and a block synthesizing step of combining blocks divided by said block dividing step to reconstruct the image (**col. 91, lines 21-63**).

6. The image processing method according to claim 1, wherein said geometric transformation is scaling (**col. 75, line 63 to col. 76, line 10, Fig. 34**).

8. An image processor for inputting image data with registration signals embedded therein, subjected to geometric transformation, and detecting registration signals from said inputted image data to perform registration processing (**col. 77, lines 58-62 and col. 78, lines 1-3, programmed Pentium microprocessor and digital signal processing board configured to operate on image data stored in memory and detect digital subliminal graticules in the image data stored in memory**), comprising: registration signal detecting means for detecting registration signals from said image data (Fig. 37, Fig. 33-36, corresponding text at **col. 75, line 13 to col. 77, line 30; col. 75, lines 13-16, Fig. 37 illustrates steps of detecting subliminal graticules**); frequency property determining means for determining frequency properties of said image data (**2D FFT of step 2 Fig. 37; steps 2-12 in Fig. 37, for example, determine frequency properties of the 2D FFT, see col. 75, line 21 (FFT routines) and subsequent processing on FFT transformed image data at col. 75, line 25 to 62**); geometric

transformation identifying means for identifying geometric transformation to which said image data is subjected, using said detected registration signals and determination results of said determination by the frequency property determining means (**Fig. 37 shows determining rotation angle (e.g., steps 6 and 7) and scale (e.g., steps 9-13); see also col. 75, lines 41-62 indicating determination of rotation angle, see col. 76, lines 41-59 discussing how to find the “fine tuned” rotation and scale); and geometric transforming means for using said identified geometric transformation to compute registered image data (col. 91, lines 58-63, specifically refers to inverse transforming to provide a registered image).**

10. A computer program product stored on a computer readable medium embodying a program which when executed on a computer (**col. 77, lines 58-62, programmed Pentium microprocessor programmed to operate on image data stored in memory and detect digital subliminal graticules in the image data stored in memory**), performs an image processing method of inputting image data with registration signals embedded therein, subjected to geometric transformation, and detecting registration signals from said inputted image data to perform registration processing, the program comprising: program codes for a registration signal detecting step of detecting registration signals from said image data (**Fig. 37, Fig. 33-36, corresponding text at col. 75, line 13 to col. 77, line 30; col. 75, lines 13-16, Fig. 37 illustrates steps of detecting subliminal graticules executed by the program codes on the Pentium microprocessor**); program codes for a frequency property determining step of determining frequency properties of said image data (2D FFT of step 2 Fig. 37; steps 2-12 in Fig. 37, for example, determine frequency properties of the 2D FFT, see col. 75, line 21 (FFT routines) and subsequent processing on FFT transformed image data at col. 75, line 25 to 62 executed by the program codes on the Pentium microprocessor); program codes for a geometric transformation identifying step of identifying geometric transformation to which said image data is subjected, using said detected registration signals and determination results of said determination in the frequency property determining step (**Fig. 37 shows determining rotation angle (e.g., steps 6 and 7) and scale (e.g., steps 9-13); see also col. 75, lines 41-62 indicating determination of rotation angle, see col. 76, lines 41-59 discussing how to find the “fine**

tuned” rotation and scale executed by the program codes on the Pentium microprocessor); and program codes for a geometric transforming step of using said identified geometric transformation to compute registered image data (col. 91, lines 58-63, specifically refers to inverse transforming to provide a registered image).

11. A computer data signal embodied in a computer readable medium, and being processed by a computer to perform an image processing method of inputting image data with registration signals embedded therein, subjected to geometric transformation, and detecting registration signals from said inputted image data to perform registration processing (col. 77, lines 58-62, programmed Pentium microprocessor programmed to operate on image data stored in memory and detect digital subliminal graticules in the image data stored in memory), comprising: code signals for use in a registration signal detecting step of detecting registration signals from said image data (Fig. 37, Fig. 33-36, corresponding text at col. 75, line 13 to col. 77, line 30; col. 75, lines 13-16, Fig. 37 illustrates steps of detecting subliminal graticules executed by the program codes on the Pentium microprocessor); code signals for use in a frequency property determining step of determining frequency properties of said image data (2D FFT of step 2 Fig. 37; steps 2-12 in Fig. 37, for example, determine frequency properties of the 2D FFT, see col. 75, line 21 (FFT routines) and subsequent processing on FFT transformed image data at col. 75, line 25 to 62 executed by the program codes on the Pentium microprocessor); code signals for use in a geometric transformation identifying step of identifying geometric transformation to which said image data is subjected, using said extracted registration signals and determination results of said determination in the frequency property determining step (Fig. 37 shows determining rotation angle (e.g., steps 6 and 7) and scale (e.g., steps 9-13); see also col. 75, lines 41-62 indicating determination of rotation angle, see col. 76, lines 41-59 discussing how to find the “fine tuned” rotation and scale executed by the program codes on the Pentium microprocessor); and code signals for use in a geometric transforming step of using said identified geometric transformation to compute registered image data (col. 91, lines 58-63, specifically refers to inverse transforming to provide a registered image).

Because claims 1-6, 8, 10, 11 have priority to at least May 16, 1996, these claims are not anticipated by U.S. Patent No. 6,741,758 under 35 U.S.C. Section 102(e)

Claim 15 is rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 1 of U.S. Patent 6,424,725. Applicant respectfully traverses this rejection. Claim 15 recites, among other elements: "transforming the media signal into a frequency domain to produce frequency components of the media signal; detecting an embedded signal in the frequency components." Claim 1 of the '725 patent has no such claim element. In particular, the act of "performing a logarithmic sampling of the media signal" in claim 1 of the '725 patent does not require a transform of the media signal into a frequency domain. Therefore, claim 15 of this application is not obvious in view of claim 1 of the '725 patent.

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Respectfully submitted,

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